[File 155] MEDLINE(R) 1950-2008/Sep 08
[File 5] Biosis Previews(R) 1926-2008/Sep W1
[File 73] EMBASE 1974-2008/Sep 10
[File 65] Inside Conferences 1993-2008/Sep 10
[File 35] Dissertation Abs Online 1861-2008/Apr
[File 23] CSA TECHNOLOGY RESEARCH DATABASE 1963-2008/AUG
[File 24] CSA Life Sciences Abstracts 1966-2008/Oct.
[File 45] EMCare 2008/Sep W1
[File 136] BioEngineering Abstracts 1966-2007/Jan
[File 95] TEME-Technology & Management 1989-2008/Aug W4
[File 98] General Sci Abs 1984-2008/Aug
[File 8] Ei Compendex(R) 1884-2008/Aug W5
[File 6] NTIS 1964-2008/Sep W3
[File 2] INSPEC 1898-2008/Aug W2
[File 144] Pascal 1973-2008/Aug W5

Set Items Description

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S1    1552533   S (NEUROLOGIC? OR NEURO OR MOTOR OR
NERVOUS()SYSTEM)(5N)(DISEASE? ? OR DISORDER? ? OR FUNCTION? OR
DYSFUNCTION? OR MANIFESTATION? ? OR DEFICIT? ? OR SYMPTOM? ?)
S2     211746   S PARKINSON? (1W)DISEASE OR HYPERKINESIA? ? OR
DYSKINESIA? ?
S3    1685761   S S1 OR S2
S4     383372   S S3/2005:2008
S5    1302389   S S3 NOT S4
limitall s5
S6     119174   S GAIT OR GAITS OR WALK OR WALKS OR STEPS OR STEPS OR
MOVEMENT? ? OR STEPPING OR WALKING
S7       7446   S CAMERA OR FILM OR FILMING OR VIDEO OR VIDEOING
S8     120143   S EDIT? ? OR EDITED OR EDITING OR CUT OR SHORTEN OR
COMPRESS OR COMPRESSING OR COMPRESSED OR SHORTER OR ABRIDG? OR REDUCE
OR ALTER?
S9      18884   S TRANSPONDER? ? OR ACTIVATOR? ? OR TRANSMITTER? ? OR
SIGNALING OR SIGNALER? ? OR SENDER OR STARTER OR SIGNALER? ?
S10        88   S (DEVICE OR MECHANISM OR INSTRUMENT OR
ELEMENT)(5N)(START? OR BEGIN?)
S11    163175   S MOVING OR TRACKING OR FOLLOWING OR FOLLOW? ? OR
TRACK? ?
S12       251   S S6 AND S7 AND S8
S13     18962   S S9 OR S10
S14      2302   S S13 AND S11
S15         0   S S12 AND S14
S16        75   S S12 AND S11
S17        47   RD S16  (unique items)
S18       877   S S7 AND S8
S19       225   S S18 AND S11
S20       225   S S19 AND S3
S21       150   S S20 NOT S16
S22       111   RD S21  (unique items)
S23      1240   S S6 (S)S7
S24         1   S S23 AND S14
S25       280   S S23(S)S11
S26       765   S S6(20N)S7
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S27        154   S S26(S)S11
S28        154   S S24 OR S27
S29        113   S S28 NOT (S16 OR S21)
S30         67   RD S29  (unique items)
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30/7/55 (Item 1 from file: 35)
Dissertation Abs Online

01688036 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
ZAGADNIENIE POMIARU WYBRANYCH CECH RUCHOW PATOLOGICZNYCH KONCZYNY GORNEJ CZLOWIEKA
Original Title: THE QUESTION OF MEASUREMENT OF SELECTED FEATURES OF THE UPPER EXTREMITY PATHOLOGICAL MOVEMENTS IN MAN (VIDEO IMAGING)

Author: SWIDER, MALGORZATA
Degree: DR.INZ.
Year: 1998
Corporate Source/Institution: POLITECHNIKA WROCLAWSKA (POLAND) (5999)
Source: Volume 6002C of Dissertations Abstracts International.
PAGE 454 . 116 PAGES
Language: POLISH
Location of Reference Copy: LIBRARY OF THE INSTITUTE OF BIOCYBERNETICS AND BIOMEDICAL ENGINEERING, POLISH ACADEMY OF SCIENCES, WARSAW, POLAND

The aim of the research was to elaborate a new method for the detection and quantification of extremity movements in humans. I was interested in pathological movements, which could be caused by different diseases of nervous system. The topic of my work was the tremor as a pathological movement of upper extremity. A new method based on video image processing was worked out. This method was applied to the study of pathological tremor in alcoholism. One CCD camera was used for recording the movement of the extremity. It was assumed that the trajectory of extremity movement and the probability density function are the features of the tremor. We consider the density function of some bivariate random continuous variable that represents the position of the extremity in 2D space. A passive marker in the shape of black annulus was adopted. It was attached to a forearm, so that a camera could track its motion in two-dimensional space. The extremity movement was analysed according to the displacement of the marker centre. The main component of the measuring system was the video frame grabber for digitising and analysing the video images. The framestore digitised the video signal at a sample rate of 10 Hz. The measure of the trajectory is the displacement vector of the marker centre. A finite mixture of bivariate continuous distribution forms the probability density function. The clustering method was used in order to separate the components of the analysed distribution. The obtained results show that detection and quantification of the upper extremity tremor in 2D space can be

successfully performed by the prepared system. The selected features of tremor characterise patients with alcoholism and distinguish them from control subjects with only physiological tremor. The outcomes demonstrate the capacity of video technique for quantifying motor impairments in clinical neurology. The verification of this method for disease other than alcoholism and in 3D space is now in progress.

30/7/59 (Item 1 from file: 45)
Fulltext available through: STIC Full Text Retrieval Options
EMCare

00556267 EMCare No: 128538546
Video preprocessing of patient environmental data for use in virtual reality assisted physical therapy systems

Steffin M.
Dr. M. Steffin, 7150 E. Camelback Road, Scottsdale, AZ 85251 United States
AUTHOR EMAIL: msteffin@steffin.com
Cyberpsychology and Behavior (CYBERPSYCHOL. BEHAV.) (United States)
1998 , 1/2 (177-185)
CODEN: CYBEF ISSN: 1094-9313
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 4
RECORD TYPE: Abstract

A variety of movement disorders, including cerebellar tremor and spasticity, may be quantified by using video-tracking techniques. Such analysis has been used to assess pharmacologic effects of antispasticity drugs and to measure performance improvements in spastic patients and in patients with cerebellar tremor by the use of corrective haptic (force) feedback. However, implementation of such techniques has been difficult in real time. Design considerations and methodology for a video preprocessor are presented. Initial results indicate that, with further development, the described approach may be used as a front end to generate therapeutically relevant positional information in real time with significantly decreased requirement for central processor commitment. Real-time output from such a preprocessor should be useable computationally to construct extensions of actual patient environments, including haptic force corridors, or permissible movement spaces, in training and assistive computerized physical therapy environments. The output of the analysis system should assist in meaningful machine interpretation of the patient's visual environment in relation to selected target-seeking behavior. Plans for refinement of the current device are discussed.

30/7/67 (Item 6 from file: 144)
Fulltext available through: STIC Full Text Retrieval Options
Pascal

11463277 PASCAL No.: 94-0300100

Procedures for gait analysis

HARRIS G F; WERTSCH J J
Marquette univ., medical coll. Wisconsin, dep. orthopedics, Milwaukee WI, USA
Journal: Archives of physical medicine and rehabilitation
, 1994, 75 (2
) 216-225
ISSN: 0003-9993 CODEN: APMHAI Availability: INIST-8199; 354000025511180150
No. of Refs.: 101 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: USA
Language: English
Observational gait analysis is clinically useful with videotape slow-motion replay and freeze-frame, offering significant improvement over unaided visual observation. Any form of observational gait analysis, however, has limited precision and is more descriptive than quantitative.
This article reviews procedures that are available for gait analysis. Gait analysis systems have evolved from cine with manual digitization, electrogoniometry, and video technology to sophisticated automated tracking systems. When used in conjunction with biomechanicalmodels, these systems allow qua ntitative analysis of many specific gait characteristics such as joint moments and powers (kinetic analysis), joint angles, angular velocities, and angular accelerations (kinematic analysis)

[File 16] Gale Group PROMT(R) 1990-2008/Sep 01
[File 160] Gale Group PROMT(R) 1972-1989
[File 148] Gale Group Trade & Industry DB 1976-2008/Sep 05
[File 621] Gale Group New Prod.Annou.(R) 1985-2008/Aug 21
[File 441] ESPICOM Pharm&Med DEVICE NEWS 2008/Aug W4
[File 149] TGG Health&Wellness DB(SM) 1976-2008/Aug W3
[File 635] Business Dateline(R) 1985-2008/Sep 11
[File 636] Gale Group Newsletter DB(TM) 1987-2008/Sep 02
[File 135] NewsRx Weekly Reports 1995-2008/Aug W5

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S1      127356   S (NEUROLOGIC? OR NEURO OR MOTOR OR
NERVOUS()SYSTEM)(5N)(DISEASE? ? OR DISORDER? ? OR FUNCTION? OR
DYSFUNCTION? OR MANIFESTATION? ? OR DEFICIT? ? OR SYMPTOM? ?)
S2       43168   S PARKINSON? (1W)DISEASE OR HYPERKINESIA? ? OR
DYSKINESIA? ?
S3      155046   S S1 OR S2
S4       74200   S S3/2005:2008
S5       80846   S S3 NOT S4
limitall s5
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S6      13570   S GAIT OR GAITS OR WALK OR WALKS OR STEPS OR STEPS OR
MOVEMENT? ? OR STEPPING OR WALKING
S7       2853   S CAMERA OR FILM OR FILMING OR VIDEO OR VIDEOING
S8      22829   S EDIT? ? OR EDITED OR EDITING OR CUT OR SHORTEN OR
COMPRESS OR COMPRESSING OR COMPRESSED OR SHORTER OR ABRIDG? OR REDUCE
OR ALTER?
S9       3205   S TRANSPONDER? ? OR ACTIVATOR? ? OR TRANSMITTER? ? OR
SIGNALING OR SIGNALER? ? OR SENDER OR STARTER OR SIGNALER? ?
S10       128   S (DEVICE OR MECHANISM OR INSTRUMENT OR
ELEMENT)(5N)(START? OR BEGIN?)
S11     28059   S MOVING OR TRACKING OR FOLLOWING OR FOLLOW? ? OR
TRACK? ?
S12        84   S S6(10N)S7
S13        50   S S11(10N)(S9 OR S10)
S14        78   S S7(10N)S8
S15       205   S S12:S14
S16       156   RD S15  (unique items)
S17       156   S S16 AND S5
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17/3,K/11 (Item 11 from file: 16)
Gale Group PROMT(R)

10555963 Supplier Number: 103995090 (USE FORMAT 7 FOR FULLTEXT)

Monitoring mom: as population matures, so do assisted-living technologies. (Innovation).
Huang, Gregory T.
Technology Review (Cambridge, Mass.) , v 106 , n 6 , p 22(2)
July-August , 2003
Language: English Record Type: Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 1115
-

...video cameras and powerful computers to detect changes in behavior and coordination signaling early-stage neurological disorders. In theory, a home system might detect the onset of Alzheimer's or Parkinson's disease before a patient deteriorates enough to seek a doctor's help, says Philippe Fauchet, the...

...early Parkinson's symptoms, the Rochester researchers are developing machine vision algorithms to extract the movements of a person's arms, legs, and torso from video shot from multiple cameras in a room. This is the first step toward a software...

17/3,K/99 (Item 25 from file: 149)
TGG Health&Wellness DB(SM)

01842798 Supplier Number: 54963599 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Kinematic and Qualitative Analysis of Lower-Extremity Movements in Preterm Infants With Brain Lesions.

van der Heide, Jolanda C; Paolicelli, Paola B; Boldrini, Antonio; Cioni, Giovanni
Physical Therapy , 79 , 6 , 546
June ,
1999
Publication Format: Magazine/Journal; Refereed
ISSN: 0031-9023
Language: English
Record Type: Fulltext; Abstract Target Audience: Professional
Word Count: 7079 Line Count: 00680

...abnormalities predictive of later cerebral palsy, and it has been useful
in predicting more subtle neurological dysfunctions.(15,18)
In the study by Droit et al,(12) qualitative Gestalt evaluation of the...analysis of LE movements and of GMs.
Instrumentation
For the kinematic analysis of the kicking movements, we used the Video Pointer system.((dagger)) The Video Pointer system
is a computer program that digitizes and transfers images to a personal computer...kinematic analysis of kicking was made, could reveal which infants were likely to develop a motor disorder. In
particular, our findings confirm the strict correlation between cramped-synchronized GMs and the later...91-120.
(15) Prechtl HFR, Einspieler C, Cioni G, et al. An early marker for neurological deficits after perinatal brain lesions. Lancet.
1997;349: 1361-1363.
(16) Cioni G, Ferrari F, Einspieler...

17/3,K/107 (Item 33 from file: 149)
TGG Health&Wellness DB(SM)

01755456 Supplier Number: 20415228 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Accuracy of observational kinematic assessment of upper-limb movements.

Bernhardt, Julie; Bate, Patricia J.; Matyas, Thomas A.
Physical Therapy , v78 , n3 , p259(12)
March ,
1998
Publication Format: Magazine/Journal; Refereed
ISSN: 0031-9023
Language: English
Record Type: Fulltext; Abstract Target Audience: Professional
Word Count: 6858 Line Count: 00611

Text:

Physical therapists commonly use observation to evaluate the movement
control deficits of people with neurological impairments following a cerebrovascular accident (CVA).(1-6) Such observations are used
to generate hypotheses...

...attend when making judgments. As Scholz pointed out in his discussion of
the analysis of motor performance in people with movement disorders, "there is a plethora of potential variables that could be measured."(20(p77)) Two noticeable...on the weaker side of the seated performer, a little behind the subject's shoulder. Camera position remained constant across subjects. Movement time was measured as the time between voltage changes in a circuit containing two pressure...

...speed (Fig. 2).
(FIGURE 2 GRAPH OMITTED)
Obtaining therapists' data. Videotape from the therapist's camera view was edited to generate three video-tapes
from which therapists made their visual judgments. One videotape was generated for each variable...25-38.
(22) Jones RG, Donaldson IM, Parkin PJ. Impairment and recovery of ipsilateral sensory-motor function following unilateral
cerebral infarction. Brain. 1989;112:113-132.
(23) Fisk JD, Goodale MA. The...

...the nature of the deficit. Exp Brain Res. 1988;72:425-435.
(24) Broberg RA. Functional arm movement: the recovery of motor function following stroke. In: Proceedings of the Eleventh International Congress of the World Confederation for Physical...
...T, Pauwels F, Nienhuis B. Motor recovery following stroke: towards a disability-orientated assessment of motor dysfunction. In: Harrison M, ed. Physiotherapy in Stroke Management. Edinburgh, Scotland: Churchill Livingstone; 1995:275-282...

17/3,K/109 (Item 35 from file: 149)
TGG Health&Wellness DB(SM)

01725959 Supplier Number: 19911437 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Changes in motor performance in persons with Parkinson's disease after exercise in a mountain area.

Sunvisson, Helena; Lokk, Johan; Ericson, Kjerstin; Winblad, Bengt; Ekman, Sirkka-Liisa
Journal of Neuroscience Nursing , v29 , n4 , p255(6)
August ,

1997
Publication Format: Magazine/Journal; Refereed
ISSN: 0888-0395
Language: English
Record Type: Fulltext; Abstract Target Audience: Professional
Word Count: 3377 Line Count: 00333
Changes in motor performance in persons with Parkinson's disease after exercise in a mountain area.

Abstract: A dozen Parkinson's disease patients experienced improvements in their motor development and self-confidence after walking 4 kilometers daily for a week in the mountains of Sweden. Despite the small test sample, the study's findings indicate that persons with Parkinson's disease can receive long-term benefits from physical training. The participants in the study showed an...
Abstract:

```
Persons with Parkinson's disease (PD) present a great
variety of signs of both physical and mental character. Among the...

...in their own flats. They were invited to volunteer for the study
through the Swedish Parkinson's Disease Association.
      Study Design
      Persons suffering from PD participated in the study during one
autumn week...

...PLM) test was used to assess motor performance. Balance and ability
to move and coordinate movements were tested by feeding data from an
opto-electronic camera into a computer program. The PLM test
measures integrated postural, locomotive and manual movements;
these...same geriatrician documented Parkinsonian disabilities and
clinical features at enrollment, using parts of the Unified Parkinson
Disease Rating Scale (UPDRS).(3) The UPDRS includes 6 subscales: 1)
mental state, behavior and mood...
```

17/3,K/119 (Item 45 from file: 149)
TGG Health&Wellness DB(SM)

01371417 Supplier Number: 12726386 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Reliability of kinematic measurements of rear-foot motion.

Mueller, Michael J.; Norton, Barbara J.
Physical Therapy , v72 , n10 , p731(7)
Oct ,
1992
Publication Format: Magazine/Journal
ISSN: 0031-9023
Language: English
Record Type: Fulltext; Abstract Target Audience: Professional

Word Count: 4280 Line Count: 00350
Author Abstract: ...interfaced motion analysis system to provide reliable data. Ten subjects with no significant orthopedic or neurological dysfunction and ranging in age from 22 to 45 years ([line over X]=29.6, SD...

Text:

Ten volunteers (8 women, 2 men) with no significant orthopedic or neurological dysfunction were tested. The absence of significant onhopedic or neurological dysfunction was determined by the tester (MJM) and operationally defined as no pain, weakness, or instability...surface of the foot, and appropriate images of the reflective markers were displayed on the video monitor. When the subject was acclimated to walking on the treadmill, video data were collected on the VCR. The videotape was allowed to run for at least...are important in relation to accuracy, either at the level of acquisition of the raw video signal (eg, camera frame rate and resolution, speed of target movement, variations in lighting conditions) or at the later stages of processing (eg, type of filtering...

[File 350] Derwent WPIX 1963-2008/UD=200857
[File 347] JAPIO Dec 1976-2007/Dec(Updated 080328)

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Set     Items   Description
S1      32251   S (NEUROLOGIC? OR NEURO OR MOTOR OR
NERVOUS()SYSTEM)(5N)(DISEASE? ? OR DISORDER? ? OR FUNCTION? OR
DYSFUNCTION? OR MANIFESTATION? ? OR DEFICIT? ? OR SYMPTON? ?)
S2      17345   S PARKINSON? (1W)DISEASE OR HYPERKINESIA? ? OR
DYSKINESIA? ?
S3      42273   S S1 OR S2
limitall s3
S4       5742   S GAIT OR GAITS OR WALK OR WALKS OR STEPS OR STEPS OR
MOVEMENT? ? OR STEPPING OR WALKING
S5        797   S CAMERA OR FILM OR FILMING OR VIDEO OR VIDEOING
S6       8804   S EDIT? ? OR EDITED OR EDITING OR CUT OR SHORTEN OR
COMPRESS OR COMPRESSING OR COMPRESSED OR SHORTER OR ABRIDG? OR REDUCE
OR ALTER?
S7       2189   S TRANSPONDER? ? OR ACTIVATOR? ? OR TRANSMITTER? ? OR
SIGNALING OR SIGNALER? ? OR SENDER OR STARTER OR SIGNALER? ?
S8        253   S (DEVICE OR MECHANISM OR INSTRUMENT OR
ELEMENT)(5N)(START? OR BEGIN?)
S9      13438   S MOVING OR TRACKING OR FOLLOWING OR FOLLOW? ? OR
TRACK? ?
S10     11818   S PATIENT OR SUBJECT OR PERSON OR INDIVIDUAL
S11        11   S S4(S)S5(S)S6
S12        11   S S11 AND S3
S13        29   S S5(10N)S6
S14        29   S S13 AND S3
S15        26   S S14 NOT S11
S16      2356   S S7 OR S8
S17       328   S S9(10N)S10
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S18         14   S S16(S)S17
S19         14   S S18 NOT (S15 OR S11)
S20         37   S S16(10N)S9
S21         37   S S20 NOT (S19 OR S15 OR S11)
S22         37   S S21 AND S3
```

Nothing relevant